

Title (en)
METHOD FOR MANUFACTURING DEVICE COMPRISING INORGANIC/ORGANIC HYBRID PEROVSKITE COMPOUND FILM AND DEVICE
COMPRISING INORGANIC/ORGANIC HYBRID PEROVSKITE COMPOUND FILM

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER VORRICHTUNG MIT ANORGANISCHEM/ORGANISCHEM HYBRIDEM
PEROWSKITEVERBINDUNGSFILM UND VORRICHTUNG MIT ANORGANISCHEM/ORGANISCHEM HYBRIDEM
PEROWSKITEVERBINDUNGSFILM

Title (fr)
PROCÉDÉ DE PRODUCTION DE DISPOSITIF COMPRENANT UN FILM DE COMPOSÉ PÉROVSKITE HYBRIDE INORGANIQUE/ORGANIQUE
ET DISPOSITIF COMPRENANT UN FILM DE COMPOSÉ PÉROVSKITE HYBRIDE INORGANIQUE/ORGANIQUE

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Application
EP 16735197 A 20160108

Priority
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Abstract (en)
[origin: EP3244455A1] A method for manufacturing a device comprising an inorganic/organic hybrid perovskite compound film, according to the present invention, comprises the steps of: a) laminating a first structure and a second structure to allow the first surface layer and the second surface layer to be in contact with each other, the first structure comprising a first surface layer containing at least one of materials i) to v) below, the second structure comprising a second surface layer containing, independently from the first surface layer, at least one of materials i) to v) below; and b) applying heat and physical force to the laminate in which the first structure and the second structure are laminated: i) an inorganic/organic hybrid perovskite compound, ii) an organic halide, iii) a metal halide, iv) an inorganic/organic hybrid perovskite compound precursor, and v) a metal halide precursor.

IPC 8 full level
H01L 51/48 (2006.01)

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Y02E 10/549 (2013.01 - EP US)

Citation (search report)
• [XY] JP 2014056921 A 20140327 - PECCELL TECHNOLOGIES INC
• [IY] CHANG-WEN CHEN ET AL: "Optical properties of organometal halide perovskite thin films and general device structure design rules for perovskite single and tandem solar cells", JOURNAL OF MATERIALS CHEMISTRY A, vol. 3, no. 17, 31 October 2014 (2014-10-31), GB, pages 9152 - 9159, XP055494462, ISSN: 2050-7488, DOI: 10.1039/C4TA05237D
• See also references of WO 2016111576A1

Cited by
WO2022180170A1; CN112201755A; EP3991220A4; JP2020025059A; US11145466B2; EP3347502A4; JP2018528326A; US10790096B2;
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